

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1.-31. (Cancelled).

32. (Currently Amended) A screening device for use with an immunoassay test membrane to which a specimen is applied for testing for the presence of a compound in the specimen, the test membrane having at least one test zone that changes reflectivity as a function of the concentration of the compound in the specimen, at least one control zone that changes reflectivity upon the application of the specimen and a background zone, said screening device including:

a receiving bracket for removably receiving the test membrane;

a light source directed to said receiving bracket for illuminating the test membrane;

a photosensitive detector assembly directed to said receiving bracket for receiving light reflected by the test membrane, said photosensitive detector ~~generating assembly~~ being configured to generate output signals representative of the concentrations of light reflected by the zones on test membrane;

a processor connected to said photosensitive detector assembly to receive the photosensitive detector assembly output signals and configured to, based on the output signals:

compare the concentration of light reflected from the control zone to a first reference value to determine if the test is successful;

compare the concentration of light reflected from the test zone to a second reference value; and

if the test is successful, generate data representative of presence of the compound in the specimen based on the comparison of the concentration of light reflected from the test zone to the second reference value.

33. (Previously Presented) The screening device of Claim 32, wherein:

the test membrane background zone reflects a fixed amount of light;

said photosensitive detector assembly generates output signals representative of the concentrations of light reflected by the test zone, the control zone and the background zone of the test membrane; and

said processor receives the output signals from said photosensitive detector assembly and is further configured to determine the first reference value based on the concentration of light reflected from the background zone.

34. (Previously Presented) The screening device of Claim 32, wherein:

the test membrane background zone reflects a fixed amount of light;

said photosensitive detector assembly generates output signals representative of the concentrations of light reflected by the test zone, the control zone and the background zone of the test membrane; and

said processor receives the output signals from said photosensitive detector assembly and is further configured to determine the second reference value based on the concentration of light reflected from the test membrane background zone.

35. (Previously Presented) The screening device of Claim 32, wherein said processor is further configured to

determine the second reference value based on the concentration of light reflected from the test membrane control zone.

36. (Previously Presented) The screening device of Claim 32, wherein:

the light reflected by the test zone and the control zone of the test membrane is visible light; and

said photosensitive detector assembly is configured to detect the concentrations of visible light reflection by the test zone and the control zone of the test membrane.

37. (Previously Presented) The screening device of Claim 32, wherein said processor is configured to, if the test is successful, based on the comparison of the concentration of light reflected from the test zone to the second reference value, generate data representative of a qualitative analysis of the presence of the compound in the specimen.

38. (Previously Presented) The screening device of Claim 31, wherein said processor is configured to, if the test is successful, based on the comparison of the concentration of light reflected from the test zone to the second reference value, generate data representative of a quantitative analysis of the presence of the compound in the specimen.

39. (Previously Presented) The screening device of Claim 32, wherein:

a display is attached to said processor; and

said processor is connected to said display and is configured to control actuation of said display so that: if the test is not successful, said processor causes said display to generate a message indicating the test is not successful; and, if the test is successful, said processor causes said

display to generate a message indicating the presence/absence of the compound in the specimen.

40. (Previously Presented) The screening device of Claim 32, wherein:

said photosensitive detector assembly generates output signals representative of concentration of light reflected from the test membrane across the test zone, the control zone and background zones that border the test zone and the control zone; and

said processor is further configured to: based on the output signals representative of the concentration of light reflected by the test zone and background zones on opposed sides of the test zone, determine the concentrations of light reflected by the test zone; and, based on the output signals representative of the concentrations of light reflected by the control zone and background zones on opposed sides of the control zone, determine the concentration of light reflected by the control zone.

41. (Previously Presented) The screening device of Claim 32, wherein said processor is further configured to:

based on the output signals from said photosensitive detector assembly, determine the position of the control zone on the test membrane;

based on the determination of the position of the control zone, determine the position of the test zone on the test membrane; and

based on the position of the test zone on the test membrane and the output signals from said photosensitive detector assembly, determine the concentration of light reflected from the test zone.

42.-61. (Cancelled).